



Massachusetts Military Reservation

PLUME RESPONSE PROGRAM

FINAL

~~DRAFT~~

FS-12 CONTAINMENT SYSTEM

DRAFT DESIGN DRAWINGS

VOLUME 2

December 1997

~~October 1996~~

Prepared by:
Jacobs Engineering Group Inc.

Document No.: AFC-J23-35K78404-M23-0001

AIR FORCE CENTER FOR ENVIRONMENTAL EXCELLENCE

**MASSACHUSETTS MILITARY RESERVATION
PLUME RESPONSE PROGRAM**

FS-12 CONTAINMENT SYSTEM

VOLUME 2

DRAFT DESIGN DRAWINGS

OCTOBER 1996

Prepared for:

**HQ AFCEE/MMR
DERA Restoration Division
Brooks Air Force Base, Texas 78235
DSN: 240-5214 COMM: (210) 536-5214**

Prepared by:

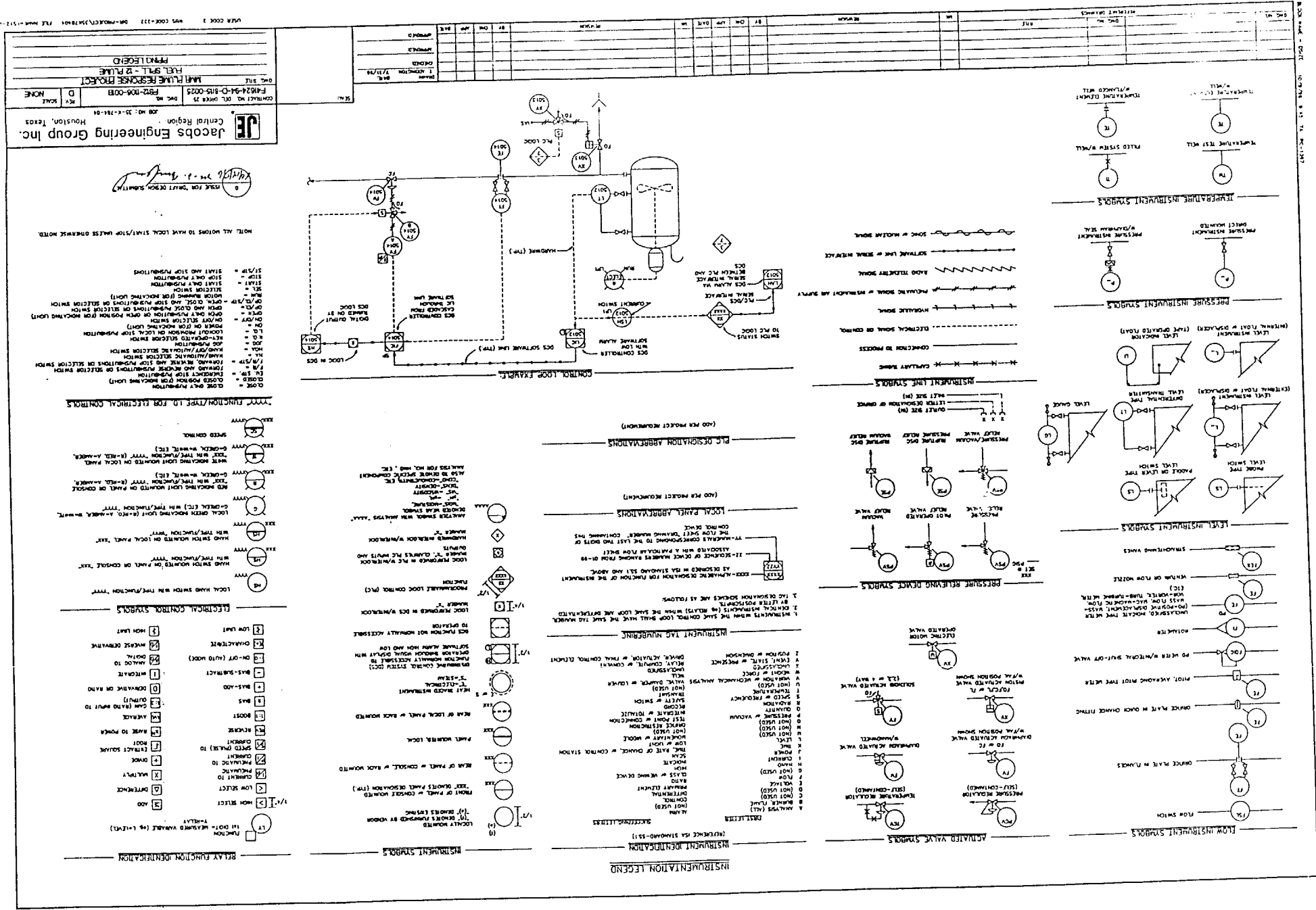
**Jacobs Engineering Group Inc.
318 East Inner Road
Otis ANGB , MA 02542
Contract No.: F41624-94-D-8115 Delivery Order No.: 0025
Document No.: AFC-J23-35K78404-M23-0001**

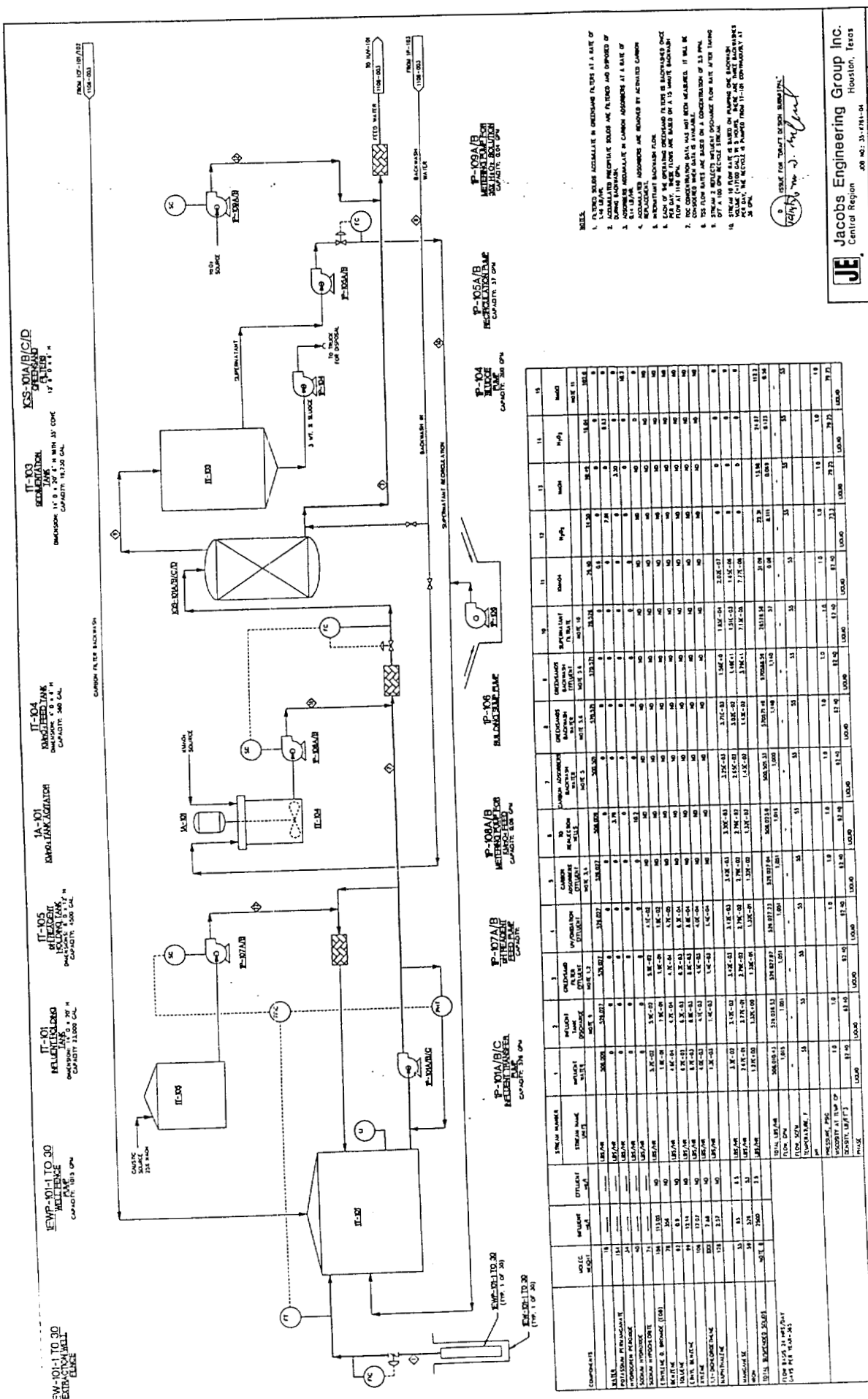
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DRAWING INDEX

DWG. No.	TITLE	REV.	ISSUE DATE
<u>LEGEND</u>			
FS12-1106-001A	PIPING LEGEND	D	10/10/96
FS12-1106-001B	INSTRUMENTATION LEGEND	D	10/10/96
<u>PROCESS FLOW DIAGRAMS</u>			
FS12-1106-002	PFD - WATER WELLS/GREENSAND FILTERS	D	10/10/96
FS12-1106-003	PFD - UV/OXIDATION REACTORS/CARBON ADSORBERS	D	10/10/96
<u>PIPING & INSTRUMENT DIAGRAMS</u>			
FS12-1106-004	P&ID - EXTRACTION WELL HEAD DETAIL	D	10/10/96
FS12-1106-005	P&ID - INFLUENT TANK	D	10/10/96
FS12-1106-006	P&ID - GREENSAND FILTERS	D	10/10/96
FS12-1106-007	P&ID - SLUDGE HANDLING	D	10/10/96
FS12-1106-008	P&ID - UV/OXIDATION	D	10/10/96
FS12-1106-009	P&ID - GRANULAR ACTIVATED CARBON SYSTEM.	D	10/10/96
FS12-1106-010	P&ID - EFFLUENT TANK	D	10/10/96
FS12-1106-011	P&ID - REINJECTION WELLS	D	10/10/96
FS12-1106-012	P&ID - EXTRACTION WELL HEADER	D	10/10/96
FS12-1106-013	P&ID - REINJECTION WELL HEADER	D	10/10/96
FS12-1106-014	P&ID - UTILITY DISTRIBUTION	D	10/10/96
<u>PIPING</u>			
FS12-1085-301	GEN. ARRANGEMENT - TREATMENT UNIT PLAN	C	10/10/96
<u>CIVIL</u>			
FS12-1046-001	WELL LOCATION PLAN	A	10/10/96
FS12-1046-002	TREATMENT BLDG. - LOCATION PLAN	B	10/10/96
FS12-1046-003	TREATMENT BLDG. SITE PLAN	A	10/10/96
<u>ARCHITECTURAL</u>			
FS12-1064-301	FLOOR & MEZZANINE PLAN	C	10/10/96
FS12-1064-302	ELEVATIONS	C	10/10/96
FS12-1064-303	ELEVATIONS AND SECTIONS	C	10/10/96

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- NOTES:
1. FILTERS SHALL BE REPLACED AT A RATE OF 1.5 GPM.
 2. FILTERS SHALL BE REPLACED AT A RATE OF 1.5 GPM.
 3. FILTERS SHALL BE REPLACED AT A RATE OF 1.5 GPM.
 4. FILTERS SHALL BE REPLACED AT A RATE OF 1.5 GPM.
 5. FILTERS SHALL BE REPLACED AT A RATE OF 1.5 GPM.
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 9. FILTERS SHALL BE REPLACED AT A RATE OF 1.5 GPM.
 10. FILTERS SHALL BE REPLACED AT A RATE OF 1.5 GPM.

Jacobs Engineering Group Inc.
Central Region
Houston, Texas

PROJECT NO. 000-122
SHEET NO. 122-1

DATE: 12/15/04
BY: JAC
CHECKED: JAC
APPROVED: JAC

ITEM NO.	DESCRIPTION	QTY	UNIT	PRICE	TOTAL
1	RAW SEWAGE	1.0	MGD	1.00	1.00
2	SEWAGE TREATMENT	1.0	MGD	1.00	1.00
3	WASTEWATER	1.0	MGD	1.00	1.00
4	WASTEWATER	1.0	MGD	1.00	1.00
5	WASTEWATER	1.0	MGD	1.00	1.00
6	WASTEWATER	1.0	MGD	1.00	1.00
7	WASTEWATER	1.0	MGD	1.00	1.00
8	WASTEWATER	1.0	MGD	1.00	1.00
9	WASTEWATER	1.0	MGD	1.00	1.00
10	WASTEWATER	1.0	MGD	1.00	1.00

THE FLOW RATES INDICATED ARE FOR USUAL PURPOSES ONLY TO INSURE ADEQUATE OPERATING FLEXIBILITY

THE FLOW RATES INDICATED ARE (IN US/GAL MINUTES) ONLY IN PULSED MODE OPERATING IN STABILITY										Flow rate Q _{max} (l/min)
LINE / REV	LINE / REV	Flow rate Q _{max} (l/min)	Flow rate Q _{max} (l/min)	Flow rate Q _{max} (l/min)	Flow rate Q _{max} (l/min)	Flow rate Q _{max} (l/min)	Flow rate Q _{max} (l/min)	Flow rate Q _{max} (l/min)	Flow rate Q _{max} (l/min)	Flow rate Q _{max} (l/min)
2'-COP-101	2'-COP-102	2'-COP-103	2'-COP-104	2'-COP-105	2'-COP-106	2'-COP-107	2'-COP-108	2'-COP-109	2'-COP-110	2'-COP-111
100-101-1	100-102-1	100-103-1	100-104-1	100-105-1	100-106-1	100-107-1	100-108-1	100-109-1	100-110-1	100-111-1
100-101-2	100-102-2	100-103-2	100-104-2	100-105-2	100-106-2	100-107-2	100-108-2	100-109-2	100-110-2	100-111-2
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100-101-72	100-102-72	100-103-72								

1. CROWD WATER EXTRACTION WELL DOUBLE WALL PVC PIPE HEADER TO FOLLOW LINE OF EXTRACTION WELL FENCE LOCATION FOR FUEL SPILL 12 INCH.
2. THE HEADER WILL BEING LATCH OF 30 WELLS WITH A VALVED TANK OFF.
3. THE WELL HEADER IS IN EXCESS OF 2000 FT FEET AND LOW TAG NOT AS SHOWN ALL COMPONENTS HAVE SAME HO'S
4. MAKE SURE THERE ARE NO LOW FLOW LINE

0 ISSUE FOR DRAFT DESIGN SUBMITTAL.
1-17/92 m.d. m.f.

JE Jacobs Engineering Group Inc.
Central Region
Houston, Texas

CONTRACT NO.	DEL. ORDER 25	GMC NO.	REV	SCALE
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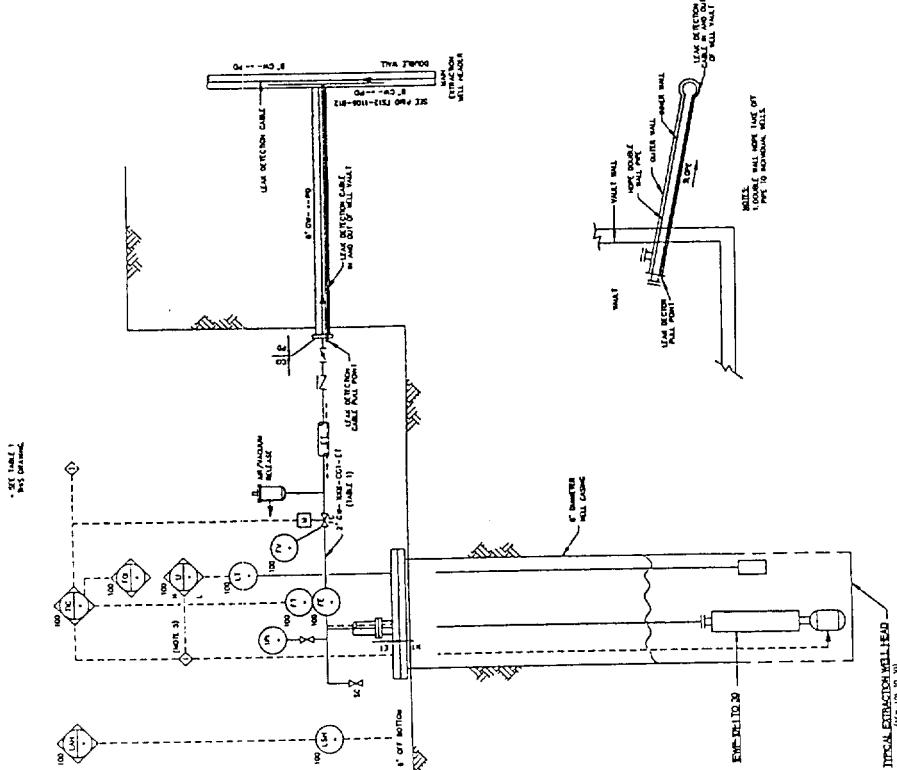
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OWC: N/A			
NAME: PLUME RESPONSE PROJECT			

FUEL SPILL - 12 PLUME

PIPING AND INSTRUMENT DIAGRAM

EXTRACTION WELL HEAD DETAIL

USLA CODE -7	WVS CODE -272	DM-P40J(C) 35x78x10	FILE NAME -1



NEW-101-1 TO 30
EXTRACTION WELL

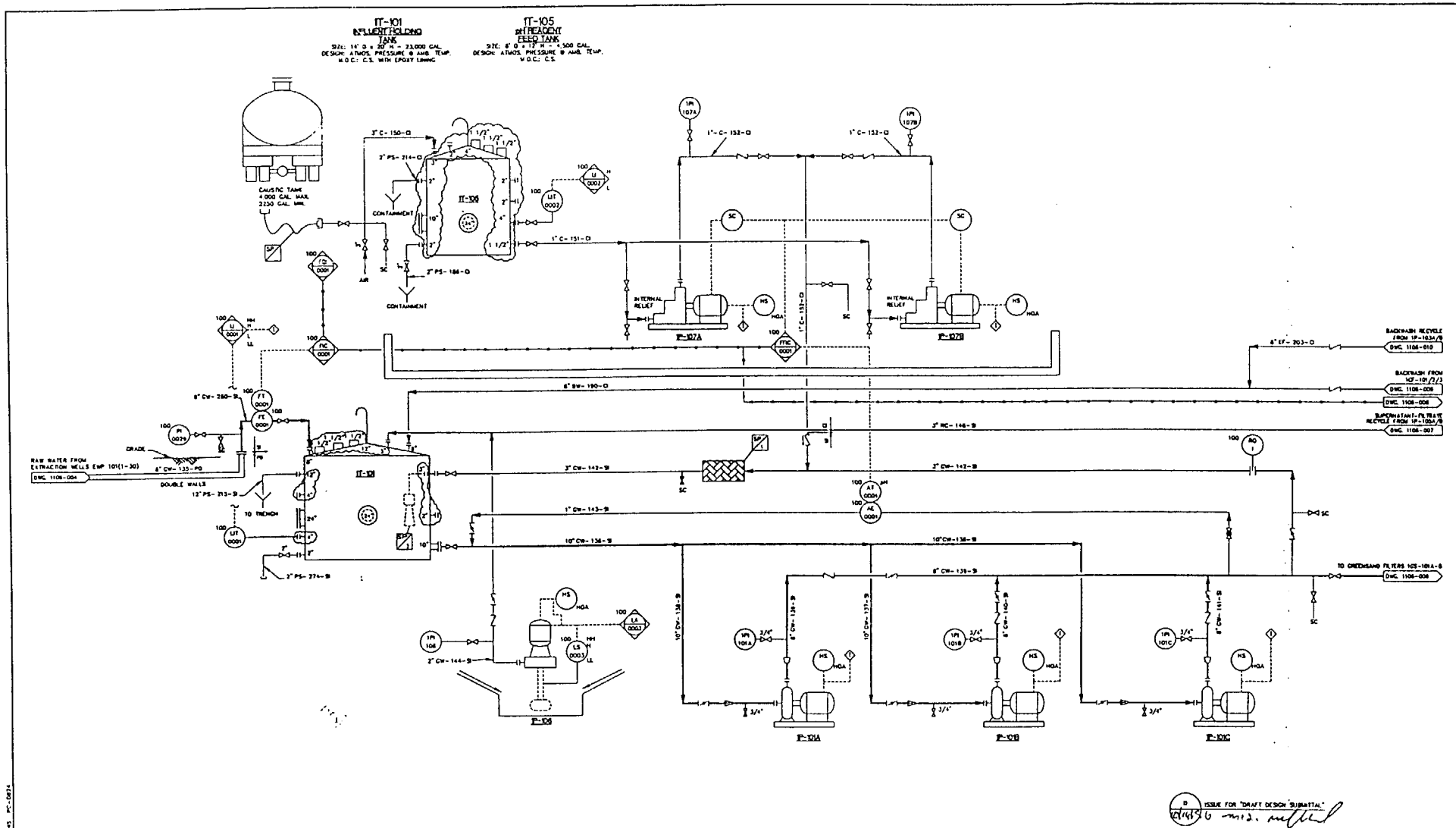
1EWP-01-1 TO 30
WELL PLAYS

WELL PLACES
LOCATION: F512 PLUME WELL FENCE
TYPE: SUBMERSIBLE, TURBINE
RATING: CPU & HEAD SEE TABLE 1
MOTOR: HP, SEE TABLE 1
WARRANTY: STANDARD 5000

DWG. NO.	
DATE OF WORK	08-09-2023

0100 0000

DOX 4A



REVISIONS									
NO.	DATE	BY	CHK	APP	DATE	REVISION	NO.	DATE	BY
1	7/25/98	T. JACOBSON					1	7/25/98	T. JACOBSON

REFERENCE DRAWINGS									
NO.	DATE	BY	CHK	APP	DATE	REFERENCE DRAWING	NO.	DATE	BY
1	7/25/98	T. JACOBSON					1	7/25/98	T. JACOBSON

APPROVALS									
NO.	DATE	BY	CHK	APP	DATE	APPROVAL	NO.	DATE	BY
1	7/25/98	T. JACOBSON					1	7/25/98	T. JACOBSON

JE Jacobs Engineering Group Inc.
 Central Region Houston, Texas

JOB NO: 35-4784-04

CONTRACT NO. DOL ORDER 25 F41024-94-D-815-0025 DMC NO. F812-1006-005

DATE: 7/25/98

PROJECT: LAUR PLUME RESPONSE PROJECT

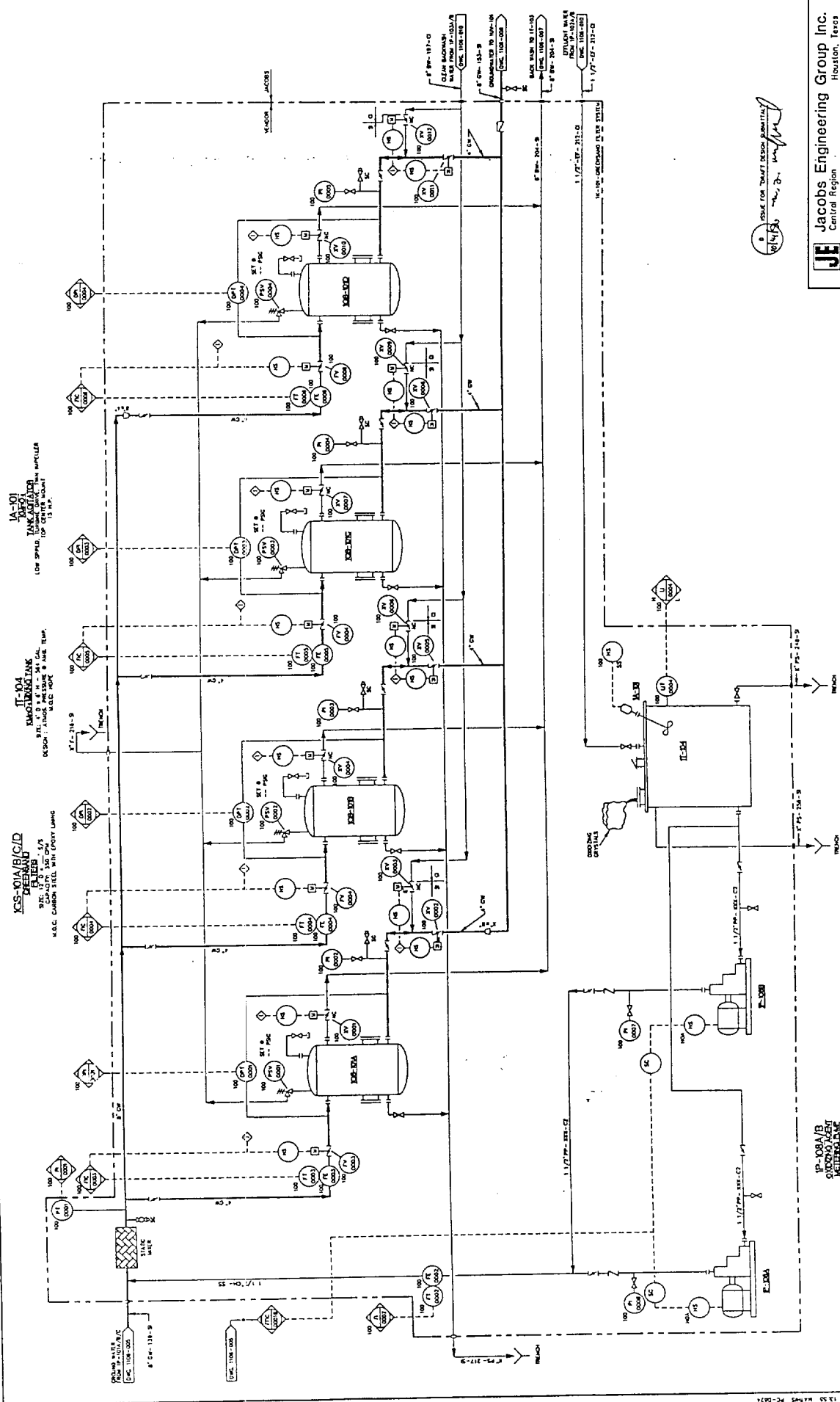
DRAWN BY: T. JACOBSON

CHECKED BY: T. JACOBSON

APPROVED BY: T. JACOBSON

SCALE: NONE

USER CODE: 1 WBS CODE: 222 DR: PROJECT/35478404 FILE NAME: 1117-005



10/14/20 ISSUE FOR DRAFT DESIGN SUBMITTAL

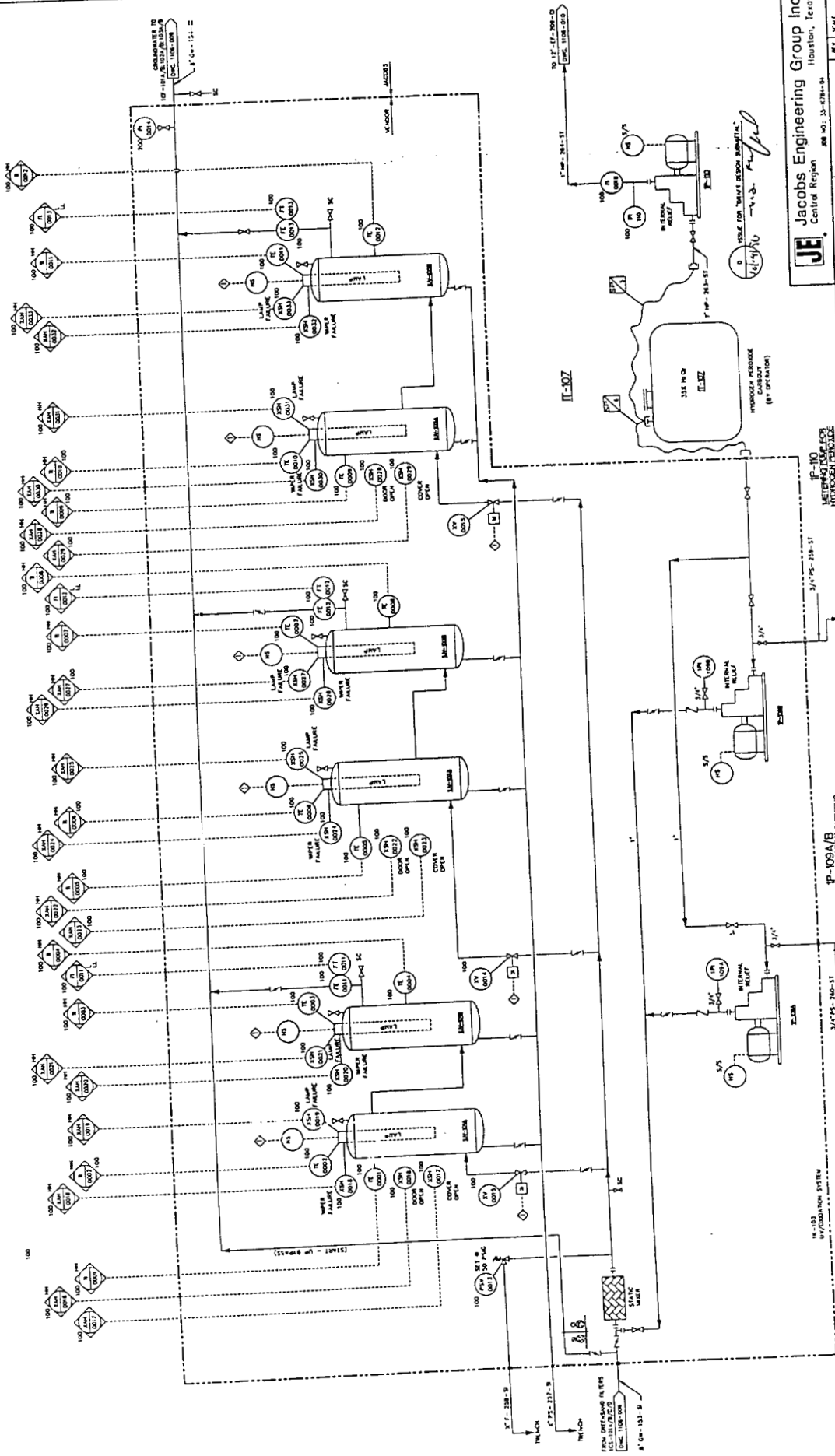
JE Jacobs Engineering Group Inc.
Central Region
Houston, Texas

CONTRACT NO. DTL ORDER 75 F-4024-94-D-0115-0025	DOC NO F512-100-008	REV D	SCALE NONE
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USLA CDOX=2 WHS CODE=272 CAR=PHOJCTY 35W78404 FILE NAME=V3-12-004

IN-KIA/B102A/B30A/B

REVISED
BY: JACOB
DATE: 05/11/00
PROJECT: 100-000-000
SHEET: 100-000-000



Jacobs Engineering Group Inc.
Houston, Texas

PROJECT NO.	100-000-000	DATE	05/11/00
PROJECT NAME	100-000-000	DATE	05/11/00
PROJECT LOCATION	100-000-000	DATE	05/11/00
PROJECT DESCRIPTION	100-000-000	DATE	05/11/00
PROJECT STATUS	100-000-000	DATE	05/11/00

REVISIONS

NO.	DATE	BY	CHK	APP	DESCRIPTION
1	05/11/00	JACOB			100-000-000

REVISIONS

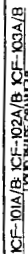
NO.	DATE	BY	CHK	APP	DESCRIPTION
1	05/11/00	JACOB			100-000-000

REVISIONS

NO.	DATE	BY	CHK	APP	DESCRIPTION
1	05/11/00	JACOB			100-000-000

REVISIONS

NO.	DATE	BY	CHK	APP	DESCRIPTION
1	05/11/00	JACOB			100-000-000

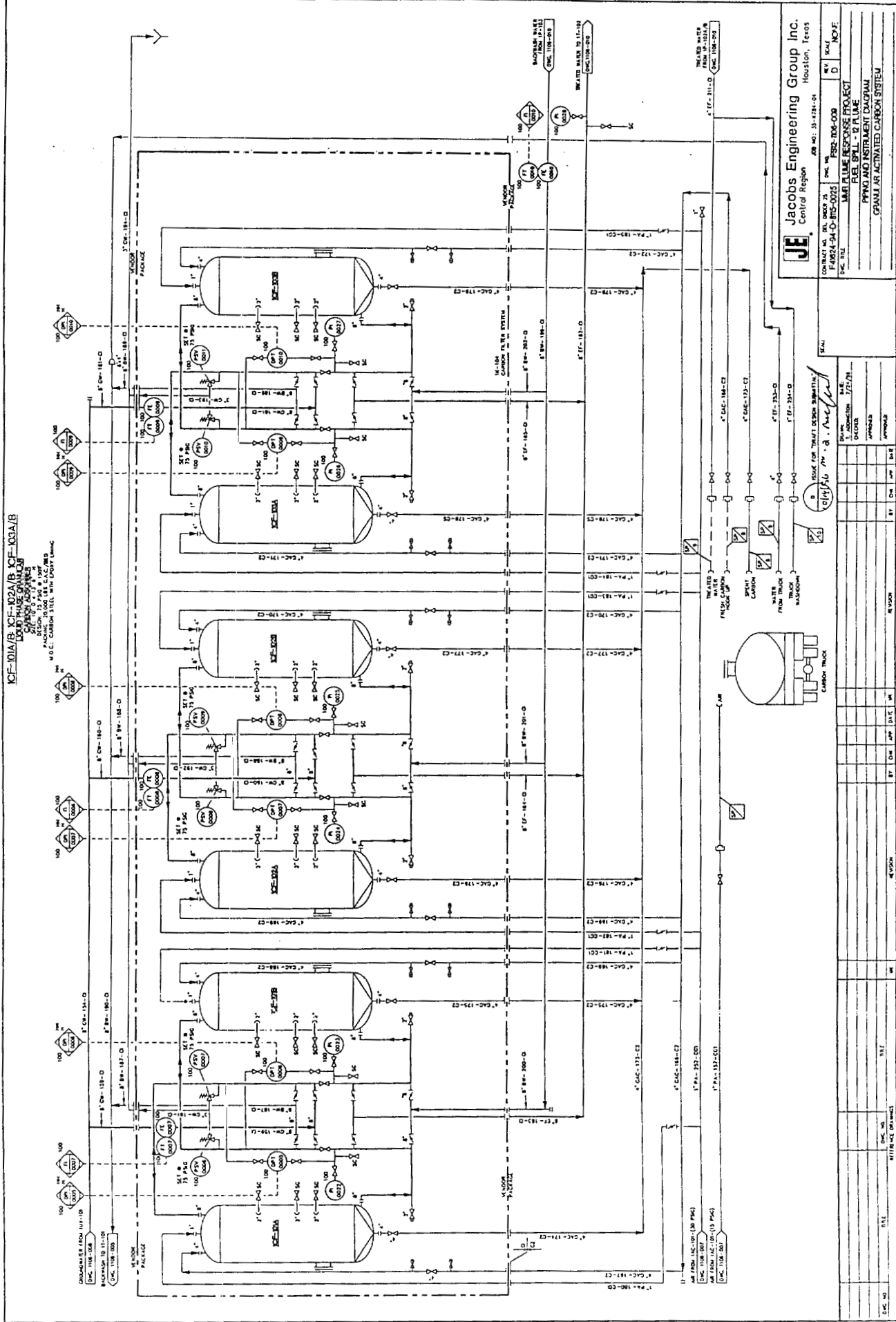


**LIQUID PULSE: GRANULAR
CATION ADSORBER**

Aug 1 8 55 A 64 40530
M 9 11 0 01 325
C 10 0 13 6

PACKING 20,000 LBS G.A.C./TRUCK
M.O.C.: CARBON STEEL WITH BONY L.

100



Jacobs Engineering Group Inc.
Central Division

Houston, Texas

from
no. 15-1784-2

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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DATE	NO.	NAME
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SUBJECT _____

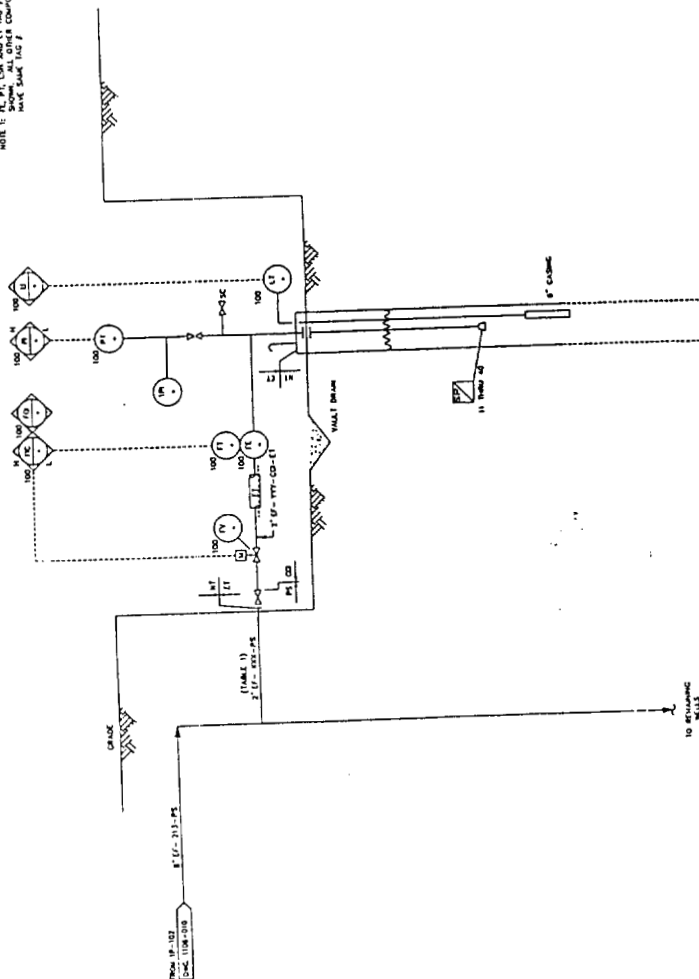
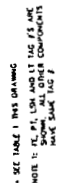
1105

DATE: 11/25/2009

TIME: 10:00

male

[illegible]



1. **NAME :**

WELL NO.	PT/PT	FLY/FLY/FLY	11/2	M	146' / FEET	146' / FT
18R-10P-1	100-PT-2000	100-FC-2000	100-1-2000	18-201-1	2'-07-218	2'-07-203
18R-10P-2	100-PT-2002	100-FC-2002	100-1-2002	18-201-2	2'-07-218	2'-07-206
18R-10P-3	100-PT-2003	100-FC-2003	100-1-2003	18-201-3	2'-07-219	2'-07-207
18R-10P-4	100-PT-2004	100-FC-2004	100-1-2004	18-201-4	2'-07-221	2'-07-208
18R-10P-5	100-PT-2005	100-FC-2005	100-1-2005	18-201-5	2'-07-222	2'-07-208
18R-10P-6	100-PT-2006	100-FC-2006	100-1-2006	18-201-6	2'-07-223	2'-07-210
18R-10P-7	100-PT-2007	100-FC-2007	100-1-2007	18-201-7	2'-07-224	2'-07-211
18R-10P-8	100-PT-2008	100-FC-2008	100-1-2008	18-201-8	2'-07-225	2'-07-213
18R-10P-9	100-PT-2009	100-FC-2009	100-1-2009	18-201-9	2'-07-224	2'-07-213
18R-10P-10	100-PT-2010	100-FC-2010	100-1-2010	18-201-10	2'-07-227	2'-07-215
18R-10P-11	100-PT-2011	100-FC-2011	100-1-2011	18-201-11	2'-07-228	2'-07-216
18R-10P-12	100-PT-2012	100-FC-2012	100-1-2012	18-201-12	2'-07-229	2'-07-216
18R-10P-13	100-PT-2013	100-FC-2013	100-1-2013	18-201-13	2'-07-230	2'-07-217
18R-10P-14	100-PT-2014	100-FC-2014	100-1-2014	18-201-14	2'-07-231	2'-07-218
18R-10P-15	100-PT-2015	100-FC-2015	100-1-2015	18-201-15	2'-07-232	2'-07-218
18R-10P-16	100-PT-2016	100-FC-2016	100-1-2016	18-201-16	2'-07-233	2'-07-219
18R-10P-17	100-PT-2017	100-FC-2017	100-1-2017	18-201-17	2'-07-234	2'-07-220
18R-10P-18	100-PT-2018	100-FC-2018	100-1-2018	18-201-18	2'-07-235	2'-07-221
18R-10P-19	100-PT-2019	100-FC-2019	100-1-2019	18-201-19	2'-07-236	2'-07-222
18R-10P-20	100-PT-2020	100-FC-2020	100-1-2020	18-201-20	2'-07-237	2'-07-223
18R-10P-21	100-PT-2021	100-FC-2021	100-1-2021	18-201-21	2'-07-238	2'-07-224
18R-10P-22	100-PT-2022	100-FC-2022	100-1-2022	18-201-22	2'-07-239	2'-07-225
18R-10P-23	100-PT-2023	100-FC-2023	100-1-2023	18-201-23	2'-07-240	2'-07-226
18R-10P-24	100-PT-2024	100-FC-2024	100-1-2024	18-201-24	2'-07-241	2'-07-228
18R-10P-25	100-PT-2025	100-FC-2025	100-1-2025	18-201-25	2'-07-242	2'-07-228
18R-10P-26	100-PT-2026	100-FC-2026	100-1-2026	18-201-26	2'-07-243	2'-07-230
18R-10P-27	100-PT-2027	100-FC-2027	100-1-2027	18-201-27	2'-07-244	2'-07-231
18R-10P-28	100-PT-2028	100-FC-2028	100-1-2028	18-201-28	2'-07-245	2'-07-232
18R-10P-29	100-PT-2029	100-FC-2029	100-1-2029	18-201-29	2'-07-246	2'-07-233
18R-10P-30	100-PT-2030	100-FC-2030	100-1-2030	18-201-30	2'-07-247	2'-07-234

FW-101-1 TO 30
PERFECTION WELLS
(INCL. OF 30)

[illegible]

2 ISSUE FOR "DRAFT DESIGN SUBMITTAL" *Jeffrey E. McQuibb*

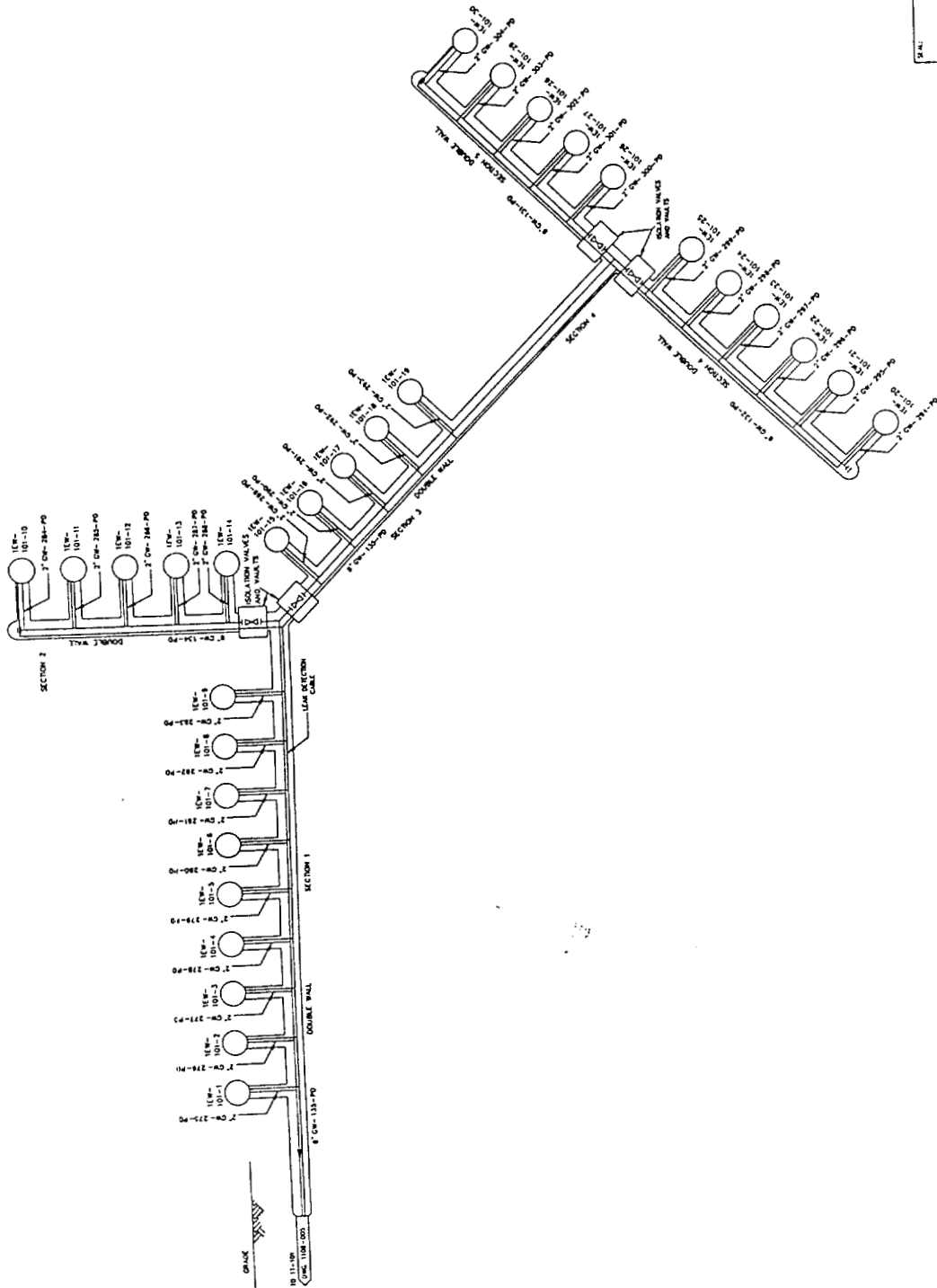
JEF Jacobs Engineering Group Inc.
Central Region
Houston, Texas
JEF 903-31-8764-04

CONTRACT NO. OIL ORDER 73 F4024-94-D-015-0023	INS. NO. PSD-106-011	REV D	SCALE NONE
BAC BILL			
MAR PLUME RESPONSE PROJECT			
FUEL BTL - 2 PLUME			
PPMG AND INSTRUMENT DIAGRAM			
PENETRATION WELL HEAD DETAILS			

	SOURCE	DATE
	1 ADDITION	7/7/98
	O-EEDS	
	APPROX-0.3	
	APPROX-0.3	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466
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EXTRACTION WELL HEADER
SECTION 1 - 100' SECTION
WITH LEAK DETECTION



- NOTES:
1. SEE WELL TAGS FOR LINES CONNECTING TO WELL.
 2. DOUBLE WALLS ARE TO BE LOCATED 10' FROM EACH OTHER.
 3. SEE LEAK DETECTION.

0 ISSUE FOR TREAT DESIGN SUBMITTAL
1/17/16

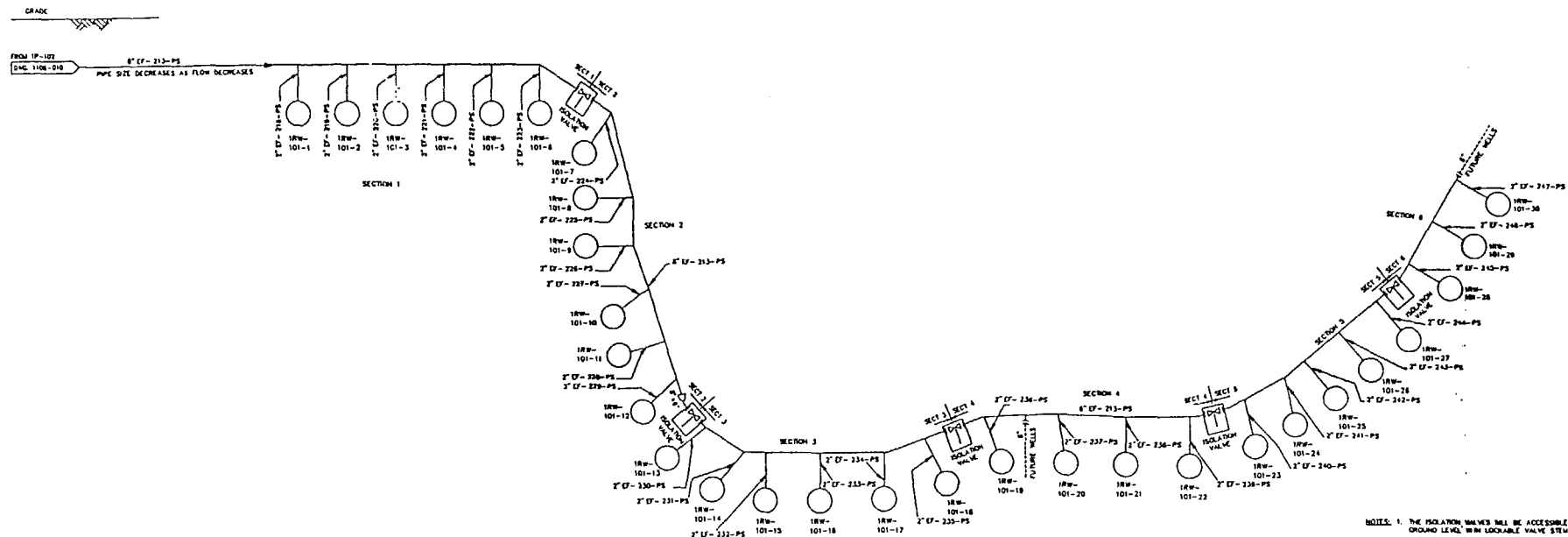
JE Jacobs Engineering Group Inc.
Central Region Houston, Texas

CONTRACT NO. 101-0048-13	DATE 04/11/16	REV. 01	SCALE D	NOTE
F4024-94-D-815-0025	DATE 04/11/16	REV. 01	SCALE D	NOTE
PROJECT NAME	DATE 04/11/16	REV. 01	SCALE D	NOTE
PROJECT LOCATION	DATE 04/11/16	REV. 01	SCALE D	NOTE
PROJECT DESCRIPTION	DATE 04/11/16	REV. 01	SCALE D	NOTE
PROJECT OWNER	DATE 04/11/16	REV. 01	SCALE D	NOTE
PROJECT MANAGER	DATE 04/11/16	REV. 01	SCALE D	NOTE
PROJECT ENGINEER	DATE 04/11/16	REV. 01	SCALE D	NOTE
PROJECT CHECKER	DATE 04/11/16	REV. 01	SCALE D	NOTE
PROJECT APPROVER	DATE 04/11/16	REV. 01	SCALE D	NOTE
PROJECT REVIEWER	DATE 04/11/16	REV. 01	SCALE D	NOTE
PROJECT SUBMITTER	DATE 04/11/16	REV. 01	SCALE D	NOTE

USER CODE: 13 WBS CODE: 133 DOW PROJECT: 33-0784-04 FILE NAME: 13-13-011

REINJECTION WELL HEADER SINGLE WALL PS PIPE

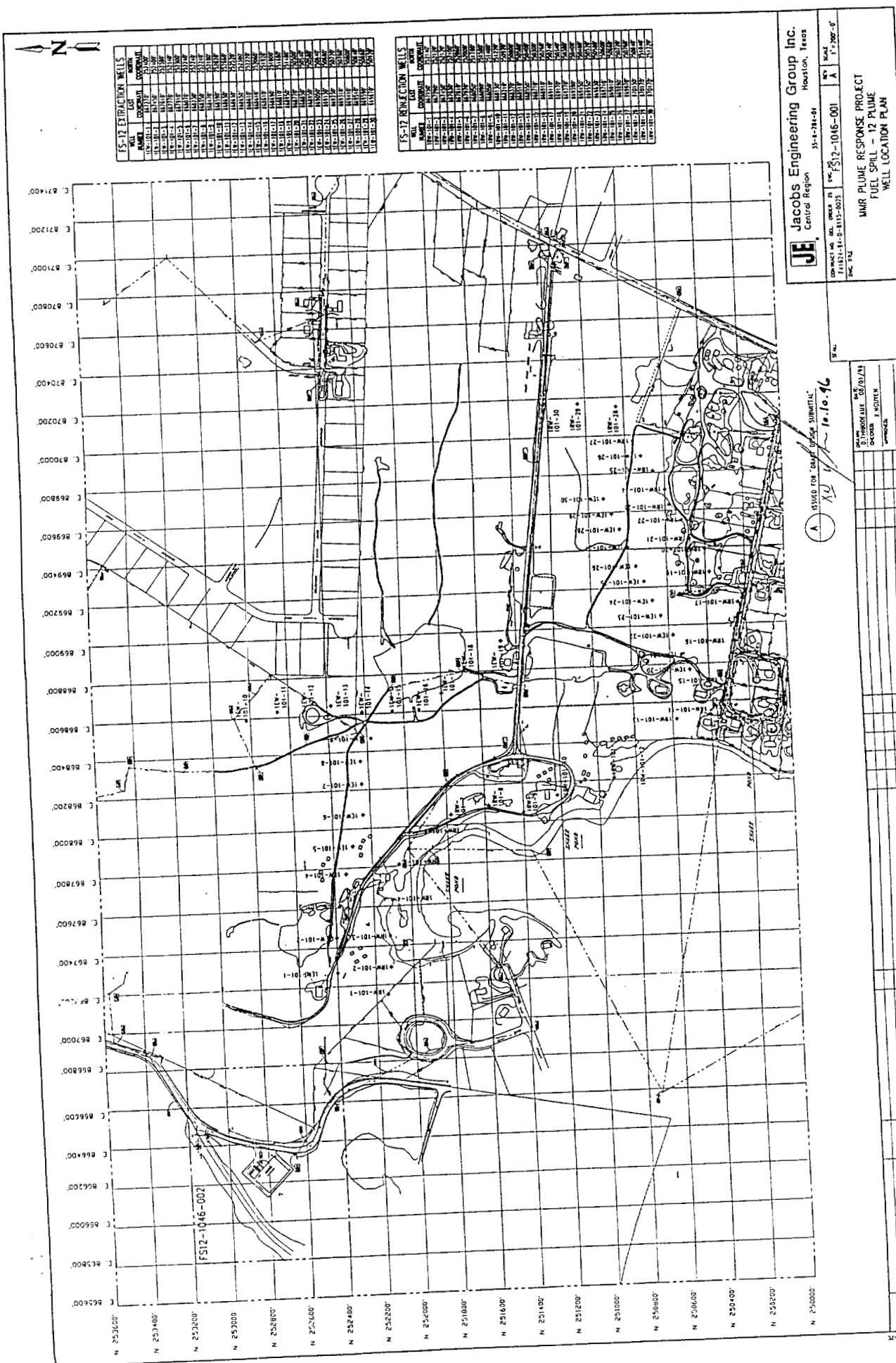
SECTION	DESIGN FLOW (GPM)	LENGTH FEET	ΔP (PSI)	SIZE (INCHES)
LEAD	1015	1500	7.8	8
1	1015	900	8.4	8
2	800	900	4.5	8
3	300	900	8	6
4	310	900	1.3	8
5	150	400	8	8
6	35	750	0.1	8



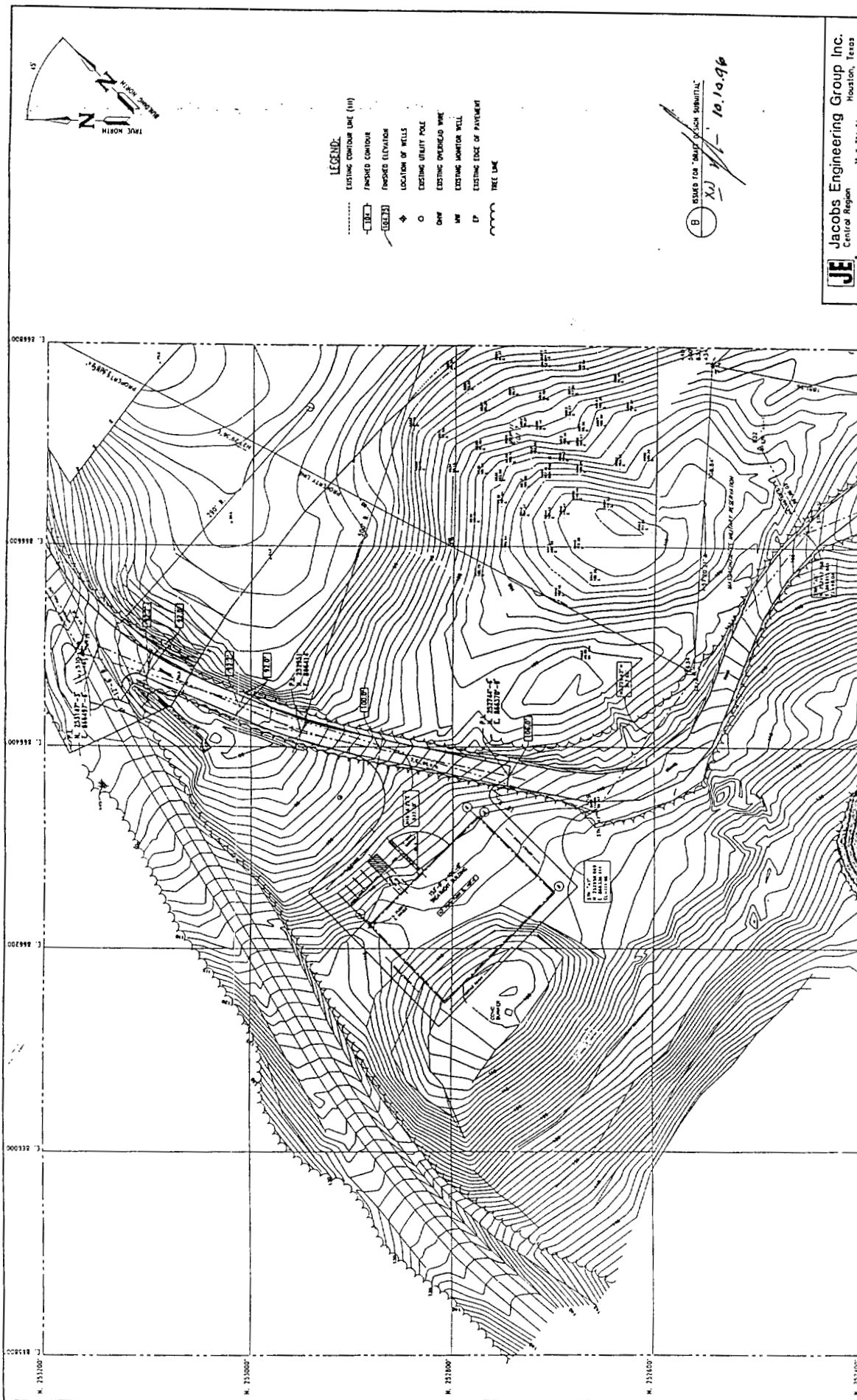
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14/11/16
J. J. Muffel

JE Jacobs Engineering Group Inc. Central Region Houston, Texas		JOB NO.: 35-1781-04	
CONTRACT NO. DOL ORDER 25 F41024-94-D-875-0025	DNC NO. PB2-106-003	REV D	SCALE NONE
DNC FILE: MAR PLUME RESPONSE PROJECT FUEL SPILL - 12 PLUME PPING AND INSTRUMENT DIAGRAM REINJECTION WELL HEADER			

16/10/16 12:30 PM PC-1387
BLOCK NAME - D01E



10/23/94 10:30 Graham 11/24/94 Amy M. 11/24/94 - 11/24/94



- LEGEND:**
- EXISTING CONTOUR LINE (ft)
 - FINISHED CONTOUR
 - PROPOSED ELEVATION
 - LOCATION OF WELLS
 - EXISTING UTILITY POLE
 - EXISTING OVERHEAD WIRE
 - EXISTING MONITOR WELL
 - EXISTING EDGE OF PAVEMENT
 - TREE LINE

ISSUED FOR "MAJOR DESIGN SUBMITTAL"

10.10.16

JE Jacobs Engineering Group Inc.
Central Region
Houston, Texas

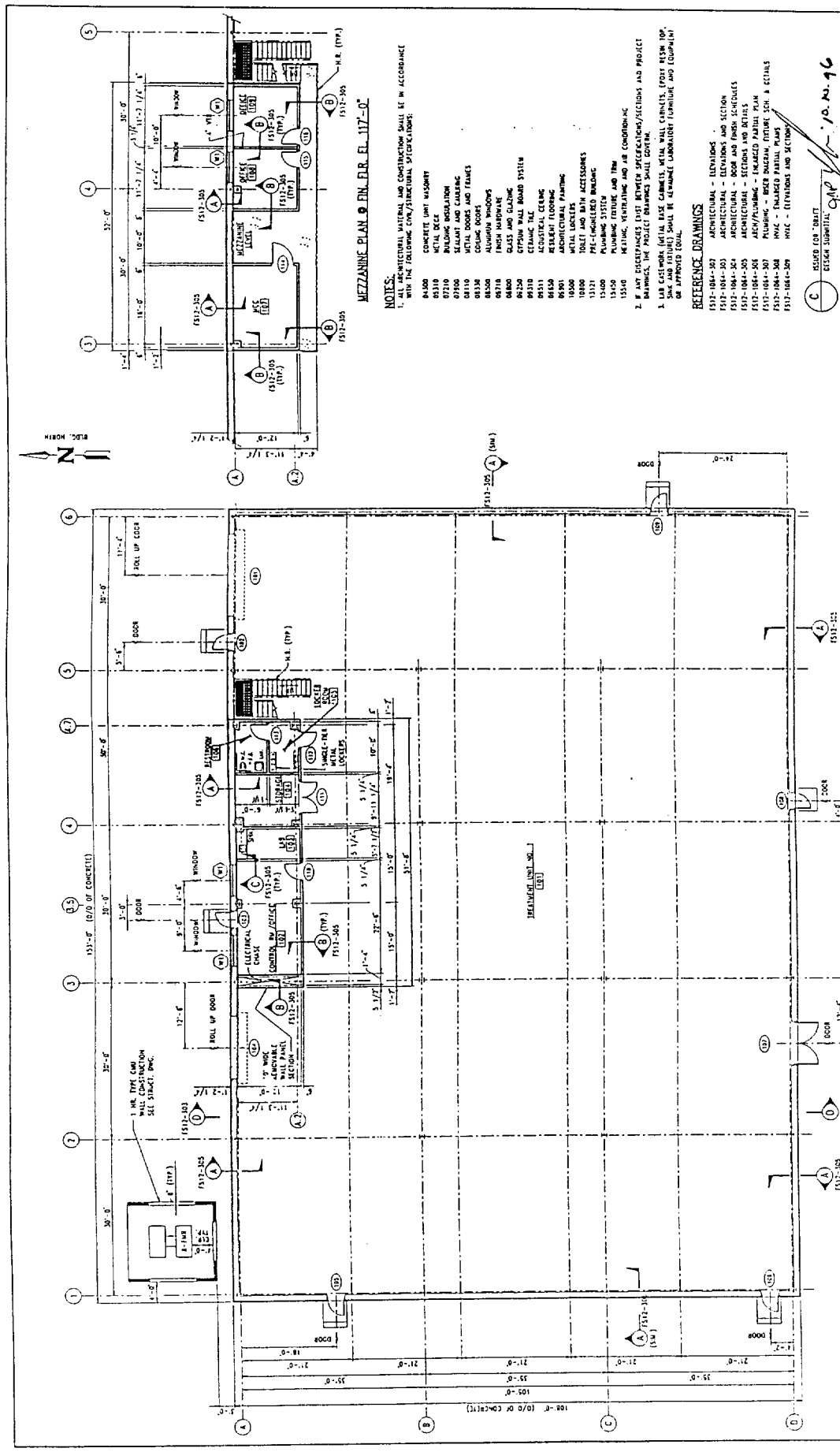
35-4-781-34

CONTRACT NO. REL. ORDER NO. 1512-1046-002
1512-1046-002
ONE FILE

SCALE
B 1"=400'-0"

MAJOR PLUME RESPONSE PROJECT
FUEL SPILL - 12 PLUME
TREATMENT BUILDING LOCATION PLAN

DATE	BY	CHKD	APP'D	REVISION	DESCRIPTION
08/11/16	1				ISSUED FOR RFP
08/11/16	2				ISSUED FOR CLEANING AND GRADING
08/11/16	3				ISSUED FOR CLEANING AND GRADING
08/11/16	4				ISSUED FOR CLEANING AND GRADING
08/11/16	5				ISSUED FOR CLEANING AND GRADING
08/11/16	6				ISSUED FOR CLEANING AND GRADING
08/11/16	7				ISSUED FOR CLEANING AND GRADING
08/11/16	8				ISSUED FOR CLEANING AND GRADING
08/11/16	9				ISSUED FOR CLEANING AND GRADING
08/11/16	10				ISSUED FOR CLEANING AND GRADING
08/11/16	11				ISSUED FOR CLEANING AND GRADING
08/11/16	12				ISSUED FOR CLEANING AND GRADING
08/11/16	13				ISSUED FOR CLEANING AND GRADING
08/11/16	14				ISSUED FOR CLEANING AND GRADING
08/11/16	15				ISSUED FOR CLEANING AND GRADING
08/11/16	16				ISSUED FOR CLEANING AND GRADING
08/11/16	17				ISSUED FOR CLEANING AND GRADING
08/11/16	18				ISSUED FOR CLEANING AND GRADING
08/11/16	19				ISSUED FOR CLEANING AND GRADING
08/11/16	20				ISSUED FOR CLEANING AND GRADING
08/11/16	21				ISSUED FOR CLEANING AND GRADING
08/11/16	22				ISSUED FOR CLEANING AND GRADING
08/11/16	23				ISSUED FOR CLEANING AND GRADING
08/11/16	24				ISSUED FOR CLEANING AND GRADING
08/11/16	25				ISSUED FOR CLEANING AND GRADING
08/11/16	26				ISSUED FOR CLEANING AND GRADING
08/11/16	27				ISSUED FOR CLEANING AND GRADING
08/11/16	28				ISSUED FOR CLEANING AND GRADING
08/11/16	29				ISSUED FOR CLEANING AND GRADING
08/11/16	30				ISSUED FOR CLEANING AND GRADING



NOTES:

- ALL ARCHITECTURAL MATERIALS AND CONSTRUCTIONS SHALL BE IN ACCORDANCE WITH THE FOLLOWING CODES/STRUCTURAL SPECIFICATIONS:
- IF ANY DISCREPANCIES EXIST BETWEEN SPECIFICATIONS/SECTIONS AND PROJECT DRAWINGS, THE PROJECT DRAWINGS SHALL GOVERN.
- LAB CUSTODIAN (METAL BASE CABINETS, METAL WALL CABINETS, EPOXY FLOOR TOP, METAL LOCKERS, ETC.) SHALL BE REMOVED IMMEDIATELY UPON COMPLETION OF APPROVED WORK.

REFERENCE DRAWINGS:

- 1512-1084-301 ARCHITECTURAL - ELEVATIONS
- 1512-1084-302 ARCHITECTURAL - ELEVATIONS AND SECTION
- 1512-1084-303 ARCHITECTURAL - ROOM AND FINISH SCHEDULES
- 1512-1084-304 ARCHITECTURAL - FLOORING AND PARTIAL PLANS
- 1512-1084-305 ARCHITECTURAL - FLOORING AND PARTIAL PLANS
- 1512-1084-306 ARCHITECTURAL - FLOORING AND PARTIAL PLANS
- 1512-1084-307 ARCHITECTURAL - FLOORING AND PARTIAL PLANS
- 1512-1084-308 ARCHITECTURAL - FLOORING AND PARTIAL PLANS
- 1512-1084-309 ARCHITECTURAL - FLOORING AND PARTIAL PLANS

DESIGN SUBMITTAL: 10.23.96

REVISIONS:

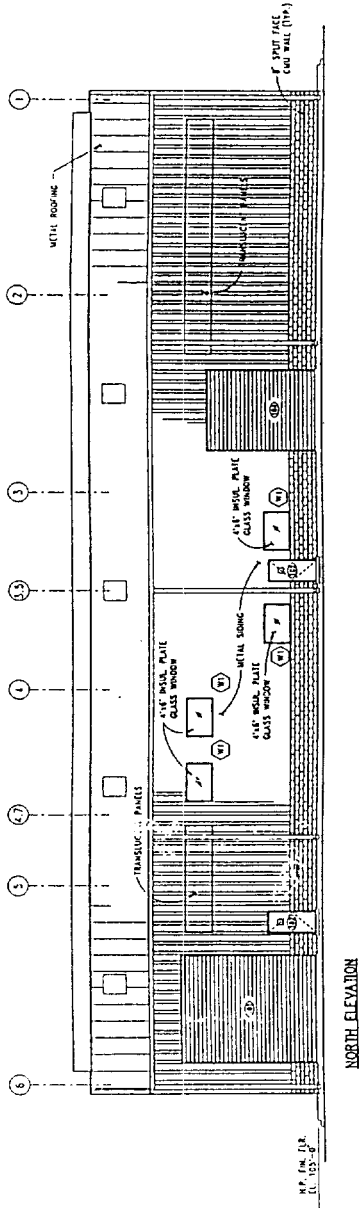
NO.	DATE	DESCRIPTION
1	10.23.96	ISSUED FOR CONSTRUCTION

PROJECT INFORMATION:

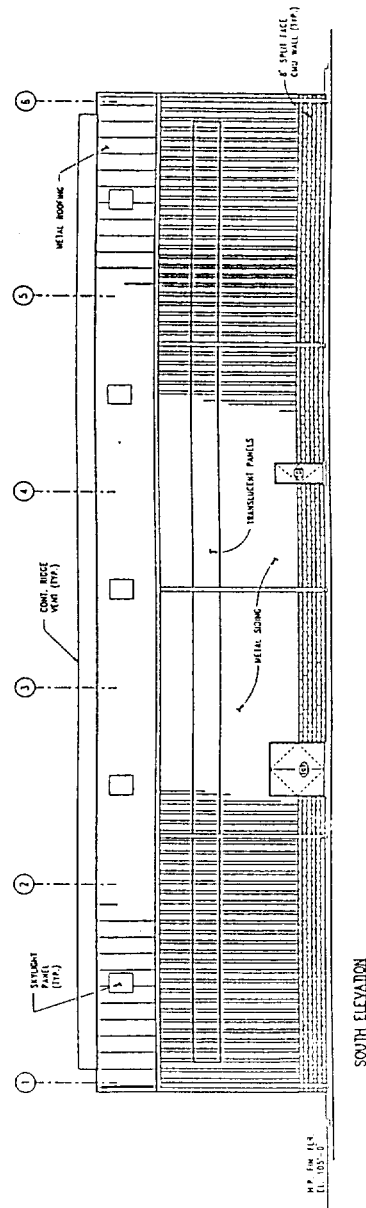
PROJECT: 1512-1084-301
 CLIENT: Jacobs Engineering Group Inc.
 LOCATION: Houston, Texas

MEZZANINE PLAN - FLOOR & MEZZANINE PLAN

1. FOR ARCHITECTURAL GENERAL NOTES SEE DRAWING FS17-1064-J01.
2. CONTINUOUS RIDGE VENT SHALL BE A 24" WID. THROAT RIDGE VENT DAMPER AND BIRD SCREEN.



NORTH ELEVATION



SOULVASTI HINDS

REFERENCE DRAWINGS:

FS12-1084-301 ARCHITECTURAL - FLOOR & CEILING PLAN

(C)

(C)

101096

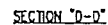
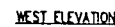
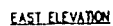
JE Jacobs Engineering Group Inc.
Central Region
Houston, Texas

10

PROJ: J 55-K784-GA

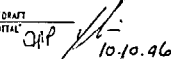
MMR -- PLUME RESPONSE PROJECT
FUEL SPILL - 12 PLUME
ARCHITECTURAL - ELEVATIONS

[illegible]



1. FOR ARCHITECTURAL GENERAL NOTES SEE DRAWING FS12-1064-301.
2. CONTINUOUS RIDGE VENT SHALL BE A 24" MIN. THREADED RIDGE VENT WITH MANUAL DAMPER AND BIRD SCREEN.

7512-1084-301 ARCHITECTURAL - FLOOR & MEZZANINE PLAN



CONTRACT NO. DEL. ORDER 25 F41824-94-D-8115-0025	DWG. NO. FS12-1064-303	REV. C	SCALE 1/8" = 1'-0"
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MMR - PLUME RESPONSE PROJECT
FUEL SPILL - 12 PLUME
ARCHITECTURAL - ELEVATIONS AND SECTION

[illegible]